

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims, in which claims 1, 2, 8 and 9 are currently amended.

1. (Currently Amended) A method for ~~synch~~ynchronising ~~synch~~ynchronizing to a CDMA-signal that contains a pilot sequence, overlaid with data sequences, comprising the following process steps:

correlating the total signal consisting of the transmitted pilot sequence and transmitted data sequences with a reference pilot sequence;

subtracting the correlation result time-delayed by one or more symbol durations of the pilot sequence from ~~the a~~ current correlation result in order to suppress the pilot sequence;

~~and subsequent~~ incoherent averaging; ; and

determining ~~the a~~ minimum of the total signal.

2. (Currently Amended) A method for ~~synch~~ynchronising ~~synch~~ynchronizing to a CDMA-signal that contains a pilot sequence, overlaid with data sequences, comprising the following process steps:

correlating the total signal consisting of the transmitted pilot sequence and transmitted data sequences with a reference pilot sequence;

subtracting the correlation result time-delayed by one or more symbol durations of the pilot sequence from the current correlation result in order to suppress the pilot sequence;

~~and subsequent~~ incoherent averaging; ;

~~additional~~ additionally coherent averaging of the correlation result over a plurality of symbol durations of the pilot sequence; ₁

subtracting the incoherent averaging result from the coherent averaging result; ₁

and

determining the a maximum of the total signal.

3. (Original) Method according to Claim 2,
wherein the CDMA-signal is subdivided into a plurality of time slots and after subtraction of the incoherent averaging result from the coherent averaging result an averaging over a plurality of time slots takes place.
4. (Original) Method according to Claim 2 ,
wherein the coherent averaging is performed by summation over a plurality of symbol durations of the pilot sequence and subsequent magnitude-formation.
5. (Original) Method according to claim 1,
wherein the incoherent averaging following the subtracting arrangement is performed by magnitude-formation and subsequent summation over a plurality of symbol durations of the pilot sequence.
6. (Original) Method according to claim 2,
wherein the incoherent averaging following the subtracting arrangement is performed by magnitude-formation and subsequent summation over a plurality of symbol durations of the pilot sequence.

7. (Original) Method according to claim 2,
wherein a weighting of the incoherent averaging result and the coherent averaging result is carried out before the subtraction of the incoherent averaging result from the coherent averaging result.
8. (Currently Amended) A device for ~~synchronising~~ synchronizing to a CDMA-signal that contains a pilot sequence, which is overlaid with data sequences, comprising:
a correlator which correlates the total signal consisting of the transmitted pilot sequence and transmitted data sequences with a reference pilot sequence; $\dot{}$
a first time-delay element which time-delays the output signal of the correlator by one or more symbol durations of the pilot sequence; $\dot{}$
a first subtracter which subtracts the output signal time-delayed in the first time-delay element from the current output signal of the correlator; $\dot{}$
an incoherent averaging unit which incoherently averages the output signal of the first subtracter; and
a device which determines ~~the~~ a minimum of the output signal.
9. (Currently Amended) A device for ~~synchronising~~ synchronizing to a CDMA-signal that contains a pilot sequence, which is overlaid with data sequences, comprising:
a correlator which correlates the total signal consisting of the transmitted pilot sequence and transmitted data sequences with a reference pilot sequence,
a first time-delay element which time-delays the output signal of the correlator by one or more symbol durations of the pilot sequence,

a first subtracter which subtracts the output signal time-delayed in the first time-delay element from the current output signal of the correlator,

an incoherent averaging unit which incoherently averages the output signal of the first subtracter,

a coherent averaging unit which coherently averages the output signal of the correlator over a plurality of symbol durations of the pilot sequence,

a second subtracter which subtracts the output signal of the incoherent averaging unit from the output signal of the coherent averaging unit and

a device which determines the a maximum of the output signal.

10. (Original) Device according to Claim 9,
wherein the CDMA-signal is subdivided into a plurality of time slots and wherein an averaging unit is connected to the output of the second subtracter and averages the output signal of the second subtracter over a plurality of time slots.
11. (Original) Device according to Claim 9,
wherein the coherent averaging unit consists of a first summator, a second time-delay element connecting the output of the first summator to an input of the first summator, said second time-delay element time-delays over one or more symbol durations of the pilot sequence, and wherein a first magnitude-forming element is connected to the output of the first summator.
12. (Original) Device according to claim 8,

wherein the incoherent averaging unit following the subtracting arrangement consists of a second summator, a third time-delay element connecting the output of the second summator to an input of the second summator, said third time-delay element time-delays by one or more symbol durations of the pilot sequence, and wherein a second magnitude-forming element is connected to the input of the second summator.

13. (Original) Device according to claim 9,

wherein the incoherent averaging unit following the subtracting arrangement consists of a second summator, a third time-delay element connecting the output of the second summator to an input of the second summator, said third time-delay element time-delays by one or more symbol durations of the pilot sequence, and wherein a second magnitude-forming element is connected to the input of the second summator.

14. (Original) Device according to claim 9,

wherein amplifying or attenuating elements are connected to the output of the coherent averaging unit and/or the output of the incoherent averaging unit following the subtracting arrangement in order to define the weighting ratio of the output of the coherent averaging unit in relation to the output of the incoherent averaging unit.